**SARASWAT EDUCATION SOCIETY'S**
**SRIDORA CACULO COLLEGE OF COMMERCE & MANAGEMENT STUDIES**
**KHORLIM, MAPUSA, GOA**

**B.Com - General (NEP 20, w. e. f. 2023-24)**

**T.Y. B.COM. SEMESTER END ASSESSMENT, OCT/NOV, 2026**
**PRACTICAL - REGULAR ODD SEMESTER V EXAMINATION**

Subject: - SUPPLY CHAIN AND LOGISTIC MANAGEMENT(CBM-323) Max Marks:- 25
Credit: - 01 Duration:- 2 hrs.

Instructions:- 1. Number of printed pages is 2
2. Attempt all the questions.

**Q.1A Case study: Maintaining vaccine quality during storage and transportation 8 marks**

Organisation: UNICEF

UNICEF supports the distribution of vaccines and other essential health supplies to countries where maintaining a reliable cold chain can be difficult. Vaccines must be stored and transported within specified temperature ranges to preserve their quality. The process involves specialised refrigeration equipment, insulated vaccine carriers, temperature monitoring and coordination between central warehouses and local health facilities. In areas with unreliable electricity, solar-powered refrigeration can help maintain suitable storage conditions.
This case illustrates how logistics managers coordinate storage facilities, transport schedules, temperature monitoring and delivery to remote locations. A failure at any stage can compromise vaccine quality and create financial and public-health consequences.

Answer the following questions:
1. Cold chain: What could happen if vaccines are exposed to unsuitable temperatures during transportation?
2. Cold chain: How can solar-powered refrigerators improve supply chain operations in remote villages?

**OR**

**Q.1B. Case study: Green Logistics - Indian Railways' Dedicated Freight Corridors 8 marks**

Organisation: Indian Railways

India transports large quantities of raw materials, manufactured goods and containers across the country. Traditionally, road transport has played a major role in freight movement. However, heavy dependence on road transport can contribute to traffic congestion, fuel consumption and greenhouse gas emissions.
To improve freight transportation, Indian Railways has developed Dedicated Freight Corridors (DFCs). These corridors provide dedicated railway infrastructure for goods trains, helping

separate freight operations from many passenger train services on conventional routes. The Eastern and Western Dedicated Freight Corridors connect important industrial regions, logistics hubs and commercial centres.

Freight transportation by rail can move large quantities of goods over long distances with comparatively lower emissions per tonne-kilometre than road transport, depending on the route, vehicle utilisation and energy source. Electrified railway operations can further reduce dependence on diesel traction. Dedicated freight infrastructure can also improve the movement of goods by increasing freight capacity and supporting more reliable transportation schedules.

The initiative illustrates how green logistics can be achieved through efficient transport planning and the selection of suitable transport modes. However, its success also depends on adequate freight volumes, effective terminal operations and coordination between railways, road transport operators, warehouses and customers.

This case demonstrates the relationship between logistics efficiency, transport infrastructure and environmental sustainability.

Answer the following questions:

1. What are Dedicated Freight Corridors, and how do they support logistics management in India?
2. Suggest two measures to improve the environmental sustainability of freight logistics in India.

**Q.2A. Supply chain mapping** **7 marks**

Select any '**consumer product**' and map its full supply chain: Supplier → Manufacturer →Distributor → Retailer → Customer.
Identify bottlenecks & inefficiency.

**OR**

**Q.2B. Supply chain mapping** **7 marks**

Select a '**consumer durable product**' and map its full supply chain: Supplier → Manufacturer →Distributor → Retailer → Customer.
Identify bottlenecks & inefficiency.

**Q.3 Journal** **5 marks**

**Q.4 Viva Voce** **5 marks**